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APPARATUS AND METHOD OF CONTROLLED DECOMPOSITION OXIDATION OF GASEOUS POLLUTANTS

Abstract of the Disclosure

An apparatus is provided for treating pollutants in a gaseous stream. The apparatus comprises tubular inlets for mixing a gas stream with other oxidative and inert gases for mixture and flame production within a reaction chamber. The reaction chamber is heated by heating elements and has an interior wall with orifices through which heated air enters into the central reaction chamber. The oxidized gases are treated also for particles removal by flowing through a packed bed. The packed bed is cooled and its upper portion with air inlets to enhance condensation and particle growth in the bed. The treated gas stream is also scrubbed in a continuous regenerative scrubber comprising at least two vertically separated beds in which one bed can be regenerated while the other is operative so that the flow may be continuously passed through the bed.

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